Docket No. TRANSMITTAL OF APPEAL BRIEF **GROTH 3.3-026** In re Application of: N. Lennart Eriksson, Lars-Otto Sislegard, and Kurt Schedin Group Art Unit Examiner Filing Date Application No. November 13, 2001 S. C. Yao 1733 09/890,139 METHOD AND ARRANGEMENT FOR THE PRODUCTION OF LIGNOCELLULOSE-Invention: **CONTAINING BOARDS** TO THE COMMISSIONER FOR PATENTS: Transmitted herewith is the Appeal Brief in this application. The fee for filing this Appeal Brief is 500.00 Small Entity × Large Entity A check in the amount of X Charge the amount of the fee to Deposit Account No. 12-1095 This sheet is submitted in duplicate. The Commissioner is hereby authorized to charge any additional fees that may be required or credit any overpayment to Deposit Account No. 12-1095 This sheet is submitted in duplicate. Dated: ___ December 27, 2004 Attorney Reg. No.: 50,631 LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP 600 South Avenue West Westfield, New Jersey 07090 (908) 654-5000

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Dated: December 27, 2004

Signature: Yamuthu Kumu (Samantha M. Kameros) Docket No.: GROTH 3.3-026

(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: Eriksson et al.

Application No.: 09/890,139

Group Art Unit: 1733

Filed: November 13, 2001

Examiner: S. C. Yao

For: METHOD AND ARRANGEMENT FOR THE

PRODUCTION OF LIGNOCELLULOSE-

CONTAINING BOARDS

APPEAL BRIEF

MS Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Applicants hereby file this brief on Appeal to appeal from the final rejection of claims 6,7,8 mailed April 27, 2004, and in response to the Advisory Action mailed August 27, 2004.

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REAL PARTY(IES) IN INTEREST

The real party in interest is Valmet Fibertech AB of Sundsvall, Sweden, the assignee of the above-referenced application.

RELATED APPEALS AND INTERFERENCES

To the best of Applicants' current knowledge, there are no related appeals or interferences pending before the U.S. Patent and Trademark Office regarding this United States patent application.

STATUS OF CLAIMS

Claims 1-5 have been canceled from the present application. Claims 6-10 are pending in the present application. Claims 9 and 10 stand withdrawn from consideration. Claims 6-8 stand rejected and are the subject of this appeal. Applicants attach a clean copy of the claims hereto as an Appendix.

STATUS OF AMENDMENTS

After receiving the Final Office Action mailed April 27, 2004, Applicants filed an Amendment After Final Rejection under 37 C.F.R. § 1.116. In the Advisory Action mailed August 27, 2004, the Examiner indicated that the amendment was entered.

SUMMARY OF CLAIMED SUBJECT MATTER

The invention as set forth in claims 6-8 is directed to a method for continuously producing lignocellulose-containing boards comprising providing a mat of disintegrated, glue-coated and dried lignocellulose-containing material, pressing the mat into a board in a steam injection press, conditioning the board by drawing a predetermined volume of air having a predetermined moisture content at a predetermined temperature through the board by means of suction applied through the board, and

grinding the conditioned board to a final thickness directly following the conditioning step.

In a preferred embodiment, the conditioning of the board comprises a first conditioning of the board by drawing a first predetermined volume of air having a first predetermined moisture content at a first predetermined temperature through the board in a first direction by means of suction applied through the board in a first direction by means of suction applied through the board, and including a second conditioning of the board by drawing a second predetermined volume of air having a second predetermined moisture content at a predetermined temperature through the board in second direction by means of suction applied through the board, wherein the second direction is opposite to the first direction.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- A. Whether claims 6-7 are unpatentable under 35 U.S.C. 103(a) as being obvious over Tisch (U.S. 5,433,905) in view of Pozzo (U.S. 4,009,073) and WO 98/50208.
- B. Whether claim 8 is unpatentable under 35 U.S.C. 103(a) as being obvious over Tisch (U.S. 5,433,905) in view of Pozzo (U.S. 4,009,073) and WO 98/50208, and further in view of Kunnemeyer (U.S. 4,883,546) or Hagstrom (U.S. 4,356,763).

ARGUMENT

The Examiner rejected claims 6 and 7 under 35 U.S.C. 103(a) as being unapatentable over U.S. Patent 5,433,905 to Tisch in view of U.S. Patent 4,009,073 to Pozzo and WO 98/50208. To establish a prima facie case of obviousness under § 103, the references relied upon for rejection must suggest the entirety of the claimed invention, and hence, "the prior art reference

(or references when combined) must teach or suggest all the claim limitations." M.P.E.P. § 2143.

Tisch, Pozzo and WO 98/50208 in combination do not make out a prima facie case of obviousness with respect to claims 6 and 7 because these references, even if taken in combination, do not teach or suggest the recitation of drawing a predetermined volume of air having a predetermined moisture content at a predetermined temperature through the board by means of suction applied through the board so as to condition the board, or the recitation of grinding the conditioned board, and, accordingly, do not teach the invention as a whole.

The Examiner admits that Tisch is silent with regard to whether a resultant particle board is subjected to a post-conditioning/treatment operation. (Official Action, Paper No. 10, p. 3.) Indeed, the Examiner concedes that Tisch does not teach conditioning the lignocellulosic particle board by drawing a predetermined volume of air with a predetermined temperature through the board by means of suction. (Id.)

The Examiner argues that this limitation would be obvious the secondary reference, Pozzo, allegedly subjecting particle board to in-line humidification by exposure to humid air at a temperature around 200° F to prevent the board buckling orwarping. Pozzo teaches an in-line where hardboard is humidified humidification process moisturized following a bake treatment in order to prevent warping and buckling of the hardboard due to the dryness of the hardboard after the formation steps. Pozzo does not teach drawing air though the hardboard, but instead teaches hardboard absorbing moisture for the humidification process. Examiner admits this in the Advisory Action. Indeed, the (Advisory Action, Paper No. 20, p. 3.) In fact, there is no suction generated in the method taught by Pozzo. In contrast, the invention of claim 6 requires that the air is drawn through the board by means of suction.

Furthermore, neither the initial baking process nor this humidification process can be considered to be part of a continuous process because the hardboard of Pozzo is baked in an oven for from 2.5 to 4 hours, and then treated in a humidified chamber for 2.5 to 8 hours. (Col. 9, lns. 27-40.) Advisory Action, the Examiner stated that the claims presently required do not positively require a continuous process because the recitation in a preamble of a process being continuous is given very little, if any, patentable weight.

Applicant respectfully disagrees. There is no litmus test preamble constitutes an to determine when the application of the recited process, or when it is an additional limitation of the claim. The effect preamble language should be given can only be resolved on review of the entirety of the patent to gain an understanding of what the inventors intend to In this case, the specification makes encompass by the claim. it clear that the invention of independent claim 6, and thus dependent claims 7 and 8, relates only to a continuous method producing lignocellulose-containing boards. specification makes it clear that the claim preamble, directed to a method for continuously producing lignocellulose-containing boards, does not merely state an intended application of recited process, but rather does give "life and meaning," provides a further positive limitation to the claim. See Corning Glass Works v. Sumitomo Electric U.S.P.A. U.S.P.Q.2d 1962 (Fed. Cir. 1989); Diversitech Corp. v. Century Steps, Inc., 7 U.S.P.Q.2d 1315 (Fed. Cir. 1988). For example, the field of the invention on page 1 of the application makes it clear that the invention relates to a method for continuously producing lignocellulose-containing boards. summary of the invention and detailed description clearly relate to a continuous method. Consequently, the Examiner's argument that the claimed preamble does not limit the scope of the claims under appeal has no basis in the specification.

In view of the above, it is Applicants' position that the remaining limitations of the claims must be interpreted as being part of a continuous process. Thus, regardless of the abovementioned deficiencies of Pozzo, the fact that it does not disclose a continuous process is significant, as the Examiner has not cited to anything in either Tisch or Pozzo creating a motivation to combine the teachings of the continuous process of Tisch with the non-continuous process of Pozzo. combination is improper. See C.R. Bard, Inc. v. M3 Sys., Inc., 157 F.3d 1340, 1351 (Fed. Cir. 1998) (there must be "some suggestion, motivation, or teaching in the prior art whereby the person of ordinary skill would have selected the components that the inventor selected and used them to make the new device."); see also Golight Inc. v. Wal-Mart Stores Inc., 355 F.3d 1327, 1336 (Fed. Cir. 2004).

Moreover, Pozzo is expressly limited to wet processes of manufacturing hardboard. (Col. 1, lns. 56-59.) Pozzo also expressly states that fiber handling and mat forming techniques differ from wet process methods because the fiber is handled in air and not in water. This is significant, as the Examiner has not cited to anything in either Tisch or Pozzo creating a motivation to combine the teachings of the process of Tisch, with the wet process of Pozzo. Again, such combination is therefore improper.

The Examiner also argues that the use of a post-gas treatment is also taught by WO 98/50208. WO 98/50208 discloses treating a board-like material by moving it through a gas agent treatment zone. However, there is no disclosure of a process for producing lignocellulose-containing boards from a mat of lignocellulose-containing material. Moreover, there is no teaching, suggestion or motivation in any of the references cited to combine the treatment process of WO 98/50208 with a

process for making lignocellulose-containing boards. Absent this suggestion or motivation, the Examiner's prima facie case of obviousness fails.

All of the claims at issue include the claim limitation of "grinding said conditioned board to a final thickness directly following said conditioning step." To address this limitation, the Examiner cites Pozzo, and states that grinding the board to a final thickness would be obvious in view of Pozzo's teaching of sanding a hardboard as part of a panel board finishing operation. However, grinding and sanding are not equivalent processes. The purpose of the after-treatment sanding in Pozzo is to make the surface of the board more even and includes removing pimples and high spots, and improving the bond of subsequent coatings. (Pozzo, col. 9, lns. 51-52.) Thus, sanding merely improves the surface quality of the board. contrast, the grinding of the present invention is meant to reduce the lignocellulose-containing board to a final thickness, the thickness of the includes a change in Furthermore, WO 98/50208 is silent with respect to a grinding process. Therefore, even if the aforementioned references were combined, the references as a whole do not teach the claimed invention.

Since neither Pozzo nor WO 98/50208 disclose the elements missing in Tisch, or even provide the necessary teaching or suggestion to combine their methods with the continuous method to produce lignocellulosic particle board of Tisch, claims 6 and 7 are not obvious in view of the cited combination. Applicants respectfully request that this rejection be reversed.

Claim 8 stands rejected under 35 U.S.C. 103(a) as being obvious over Tisch (U.S. 5,433,905) in view of Pozzo 4,009,073) and WO 98/50208, and further in view of Kunnemeyer (U.S. 4,883,546) or Hagstrom (U.S. 4,356,763). Claim 8 includes all of the elements of claim 6, and further includes the element that the pressed mat provides a board having a pair of surface layers and a center layer, and the pair of surface layers and the center layer have substantially the same density. For the same reasons as stated above with respect to the Tisch, Pozzo and WO 98/50208, Applicants submit that the prior art would not render claim 8 obvious. None of the additionally cited references teach or suggest the elements missing in Tisch, the primary reference, including the recitation that the pair of surface layers and the center layer have substantially the same density.

Hagstrom is directed to a device for use in a hydraulically-operated press, and does not teach a continuous process for making lignocellulosic containing boards, or that uniform density can be achieved using such a process. Moreover, there is no teaching, suggestion or motivation in any of the references cited to combine the press control device of Hagstrom with a process for making lignocellulose-containing boards.

Kunnemeyer discloses a process for making wood fiber boards from homogeneous fine wood dust and not, more generally, lignocellulosic particles. It does not teach the missing elements of Tisch. At best, Kunnemeyer discloses that its "as uniform density distribution requires a possible." (Kunnemeyer, col. 1, lns. 21-25.) However, there is no disclosure that this is equivalent to discrete layers having "substantially the same" density, nor is there a teaching, suggestion or motivation in any of the references cited to combine the process of Kunnemeyer, which employs fine wood dust, with a continuous process for making lignocellulose-containing boards. Therefore, Applicants respectfully request that this rejection be reversed.

CONCLUSION

For the reasons set forth above, Applicant respectfully submits that this honorable Board should reverse all rejections on appeal, and issue a Notice of Allowance.

Dated: December 27, 2004

Respectfully submitted,

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APPENDIX A - CLAIMS

A copy of the claims on appeal is set forth below.

- A method for continuously producing lignocellulosecontaining boards comprising providing a mat of disintegrated, dried lignocellulose-containing material, glue-coated and pressing said mat into a board in a steam injection press, drawing a predetermined volume of air having a predetermined moisture content at a predetermined temperature through said board by means of suction applied through said board so as to condition said board, and grinding said conditioned board to a final thickness directly following said conditioning step.
- 7. The method of claim 6 wherein said conditioning of said board comprises a first conditioning of said board by drawing a first predetermined volume of air having a first predetermined moisture content at a first predetermined temperature through said board in a first direction by means of suction applied through said board, and including a second conditioning of said board by drawing a second predetermined volume of air having a second predetermined moisture content at a second predetermined temperature through said board in a second direction by means of suction applied through said board, wherein said direction is opposite to said first direction.
 - The method of claim 6 wherein said pressing of said mat into said board provides a board having a pair of surface layers and a center layer, and wherein said pair of surface layers and said center layer have substantially the same density.